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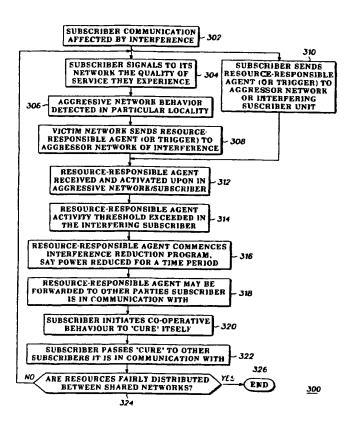
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(54) Title: ADAPTION FUNCTION IN A RESOURCE-IRRESPONSIBLE COMMUNICATION UNIT FOR REDUCING A LEVEL OF INTERFERENCE OR MAKING A PORTION OF A SHARED RESOURCE AVAILABLE FOR USE



(57) Abstract: A wireless communication system (200) comprises one or more communication networks supporting communications for a plurality of communications units on a shared communication resource. An identification function (144) identifies interference within, or non-availability of, a portion of the shared resource; and a communication adaptation function (142), responsive to a resource-responsible agent (140) that is triggered when interference is identified, reduces a level of interference or makes a portion of the shared resource available for use. A communication unit and a method of sharing a communication resource are also provided. In this manner, a mechanism identifies and targets those resource irresponsible users for automatic adjustment of their performance attributes to minimise interference in one or more communication networks.

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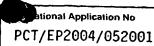
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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04Q7/36 H04L H04L12/24 H04L12/56 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) H04Q H04L H04B IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category * Relevant to claim No. WO 01/35607 A (VOYAN TECHNOLOGY) Х 24 17 May 2001 (2001-05-17) paragraphs [0016], [0017] 25 paragraph [0022] - paragraph [0026] Α 1-5,10,26,27 paragraphs [0032], [0034], [0036] US 2003/123420 A1 (SHERLOCK IAN J) Υ 1-5, 3 July 2003 (2003-07-03) 10-20, 24,26-29 paragraph [0003] - paragraph [0005] paragraphs [0008], [0009] paragraph [0025] - paragraph [0031] abstract Further documents are listed in the continuation of box C. ΧÌ Patent family members are listed in annex. * Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the investigation. "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed in the art. "8" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 03, 06, 05 23 May 2005 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Bösch, M Fax: (+31-70) 340-3016

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WO 01/78434 A (BIGHAM JOHN; CUTHBERT LAURIE (GB); PARINI CLIVE (GB); QUEEN MARY & 10-20	ation) DOCUMENTS CONSIDERED		
LAURIE (GB); PARINI CLIVE (GB); QUEEN MARY & WE) 18 October 2001 (2001-10-18) page 3, line 1 - line 32 page 5, line 5 - page 6, line 18 page 8, line 26 - page 12, line 32 abstract US 5 594 946 A (MENICH BARRY J ET AL) 14 January 1997 (1997-01-14) column 1, line 55 - column 2, line 13 column 2, line 43 - line 59 column 7, line 31 - column 8, line 58 abstract; figure 4 US 2003/016651 A1 (CHU WAI YIN ET AL) 23 January 2003 (2003-01-23) paragraph [0007] paragraph [0011] - paragraph [0016] paragraph [0063] A WO 98/23101 A (SHTROM VICTOR; FROST OTIS L (US); ARGO SYSTEMS INC (US); HOGENAUER EU) 28 May 1998 (1998-05-28) page 7, line 3 - page 8, line 10 EP 0 621 707 A (1BM) 26 October 1994 (1994-10-26) page 3, line 51 - line 56 page 5, line 9 - line 36 page 7, line 50 - page 8, line 46 page 9, line 40 - page 12, line 31 P,X EP 1 420 602 A (HONG KONG APPLIED SCIENCE AND) 19 May 2004 (2004-05-19) paragraph [0021] paragraph [0021] paragraph [00225] - paragraph [0028]			Relevant to claim No.
14 January 1997 (1997-01-14) 10-26 column 1, line 55 - column 2, line 13 column 2, line 43 - line 59 column 7, line 31 - column 8, line 58 abstract; figure 4 A US 2003/016651 A1 (CHU WAI YIN ET AL) 23 January 2003 (2003-01-23) paragraph [0007] paragraph [0011] - paragraph [0016] paragraph [0063] A WO 98/23101 A (SHTROM VICTOR; FROST OTIS L (US); ARGO SYSTEMS INC (US); HOGENAUER EU) 28 May 1998 (1998-05-28) page 7, line 3 - page 8, line 10 Y EP 0 621 707 A (IBM) 26 October 1994 (1994-10-26) page 3, line 51 - line 56 page 7, line 50 - page 8, line 46 page 9, line 40 - page 12, line 31 P,X EP 1 420 602 A (HONG KONG APPLIED SCIENCE AND) 19 May 2004 (2004-05-19) paragraph [0021] paragraph [0022]	LAURIE (GB); PARI & WE) 18 October page 3, line 1 - page 5, line 5 - page 8, line 26 -	NI CLIVE (GB); QUEEN MARY 2001 (2001–10–18) line 32 page 6, line 18	10-20, 24,26-29
abstract; figure 4 US 2003/016651 A1 (CHU WAI YIN ET AL) 23 January 2003 (2003-01-23) paragraph [0007] paragraph [0011] - paragraph [0016] paragraph [0063] A	14 January 1997 (column 1, line 55 column 2, line 43	1997-01-14) - column 2, line 13 - line 59	1-5, 10-20, 26-29
23 January 2003 (2003-01-23) paragraph [0007] paragraph [0011] - paragraph [0016] paragraph [0063] A	abstract; figure	4 	1-5
paragraph [0011] - paragraph [0016] paragraph [0063] A	23 January 2003	2003-01-23)	10-20, 26-29
L (US); ARGO SYSTEMS INC (US); HOGENAUER EU) 28 May 1998 (1998-05-28) page 7, line 3 - page 8, line 10 Y EP 0 621 707 A (IBM) 26 October 1994 (1994-10-26) A page 3, line 51 - line 56 page 5, line 9 - line 36 page 7, line 50 - page 8, line 46 page 9, line 40 - page 12, line 31 P,X EP 1 420 602 A (HONG KONG APPLIED SCIENCE AND) 19 May 2004 (2004-05-19) paragraph [0008] - paragraph [0012] paragraph [0021] paragraph [0025] - paragraph [0028]	paragraph [0011] paragraph [0063]		
26 October 1994 (1994-10-26) page 3, line 51 - line 56 page 5, line 9 - line 36 page 7, line 50 - page 8, line 46 page 9, line 40 - page 12, line 31 P,X EP 1 420 602 A (HONG KONG APPLIED SCIENCE AND) 19 May 2004 (2004-05-19) paragraph [0008] - paragraph [0012] paragraph [0021] paragraph [0025] - paragraph [0028]	L (US); ARGO SYS	EMS INC (US); HOGENAUER 1998-05-28)	1-5, 10-20, 26-29
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AND) 19 May 2004 (2004-05-19) paragraph [0008] - paragraph [0012] paragraph [0021] paragraph [0025] - paragraph [0028]	page 7, line 50	page 8, line 46	
paragraph [0031] - paragraph [0034] paragraph [0042] paragraph [0047] - paragraph [0054] paragraphs [0059], [0062], [0065]	AND) 19 May 2004 paragraph [0008] paragraph [0021] paragraph [0025] paragraph [0031] paragraph [0042] paragraph [0047]	(2004-05-19) - paragraph [0012] - paragraph [0028] - paragraph [0034] - paragraph [0054]	1,24,26

INTERNATIONAL SEARCH REPORT

International application No. PCT/EP2004/052001

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-5, 10-20, 24-29
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5,10-20,24-29

Independent Claims 1, 10, 24 and 26 relate to the provision of a resource-responsible agent for reducing a level of interference or making a portion of the shared resource available for use, in particular to:

- an identification function for identifying interference,

- a resource-responsibility agent responsive to the

identification function, and

- a communication adaption function responsive to the resource-responsibility agent, for reducing a level of interference or making a portion of the shared resource available for use.

2. claims: 6-9,21-23

Independent Claim 21 relates to a reconciliation and mediation agent for reconciling an interference that a first network causes to (an)other network(s) by being operably coupled to and mediating between the at least two interfering uncoordinated networks.

Dependent claims 6-9 relate to an appliance of the second invention in the first invention.

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/EP2004/052001

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0135607	Α	17-05-2001	AU	1481201		06-06-2001
• •			AU	1593501		06-06-2001
			ΑU	1596901		06-06-2001
			AU	1762301		06-06-2001
•			EP	1232636		21-08-2002
,			WO	0135607		17-05-2001
			WO	0135609		17-05-2001
			WO	0135614		17-05-2001
			WO	0135611		17-05-2001
			US	6870901		22-03-2005
			AU	1759801		06-06-2001
			AU	5287201		03-07-2001
			EP	1232569		21-08-2002
			WO	0135608		17-05-2001
			WO	0147170		28-06-2001
			US 	6834109	 RT	21-12-2004
US 2003123420	A1	03-07-2003	NONE			
WO 0178434	Α	18-10-2001	GB	2361385	Δ	17-10-2001
NO 0170101	,,	10 10 2002	ΑÜ	4854801		23-10-2001
			EP	1279308		29-01-2003
			WO	0178434		18-10-2001
			US	2004043764		04-03-2004
JS 5594946 A	Α	14-01-1997	AU	678943	B2	12-06-1997
			ΑU	5414796	Α	18-09-1996
			CA	2187326	A1	06-09-1996
			DE	69629773	D1	09-10-2003
			DE	69629773		18-03-2004
			EP	0758505		19-02-1997
			FI	964292		25-10-1996
			IL	116868		12-03-1999
			JP	9512694		16-12-1997
			WO	9627246	Al	06-09-1996
US 2003016651	A1	23-01-2003	NONE			
WO 9823101 A	Α	28-05-1998	ΑU	5442998	A	10-06-1998
			BR	9713093		28-03-2000
			WO	9823101		28-05-1998
EP 0621707	Α	26-10-1994	US	5394433	Α	28-02-1995
	-		CA	2114570		23-10-1994
			DE	69432810		17-07-2003
			DE	69432810		15-04-2004
			EΡ	0621707		26-10-1994
			JP	2501301	B2	29-05-1996
			JP	7015443		17-01-1995
EP 1420602	Α	19-05-2004	US	2004077354	A1	22-04-2004
		·	CN	1523916		25-08-2004
			EΡ	1420602	A2	19-05-2004

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